

FIG. 1

*Engineering Demand Shifts Via Price Optimizations*

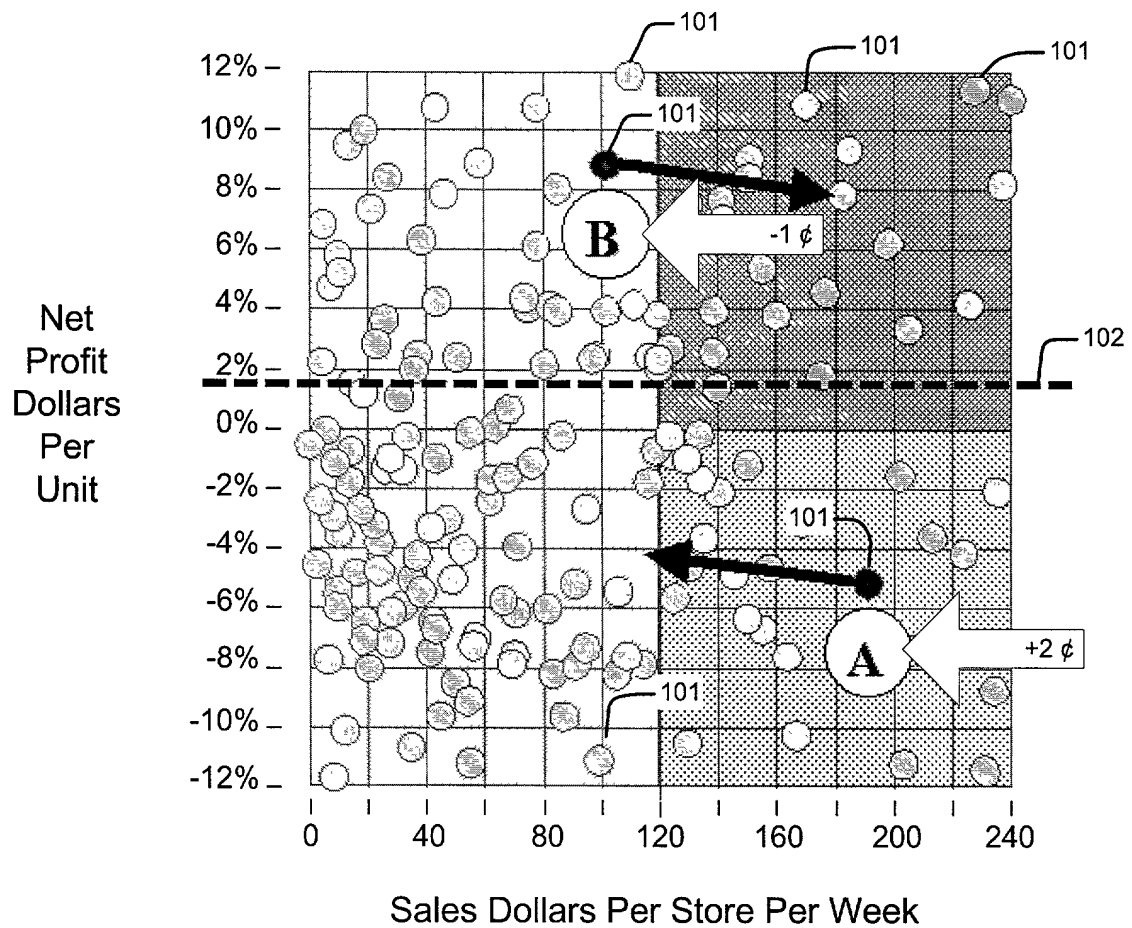


FIG. 2

Apparatus for Merchandise Price Optimization

200

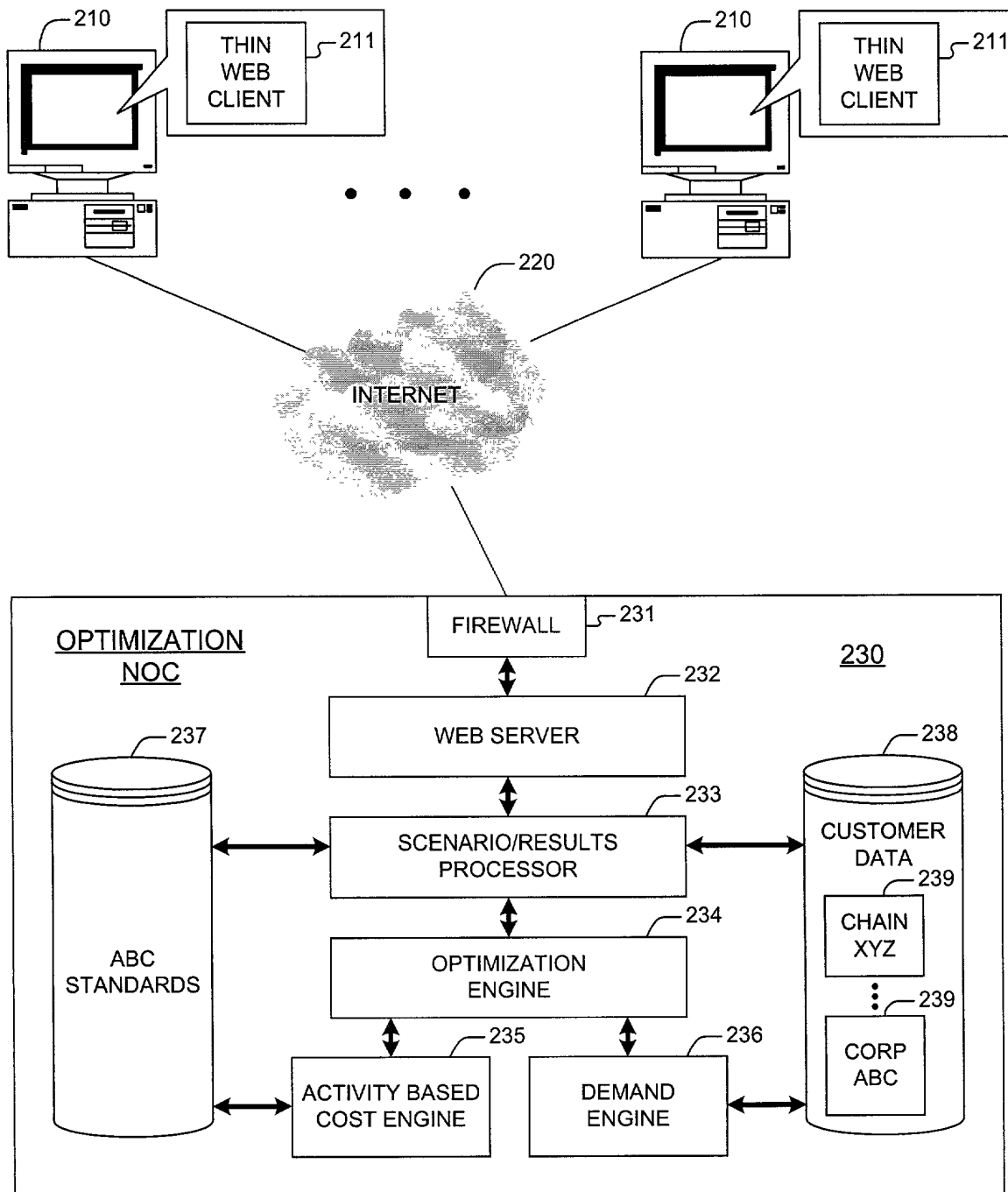


FIG. 3

Optimization Engine Details

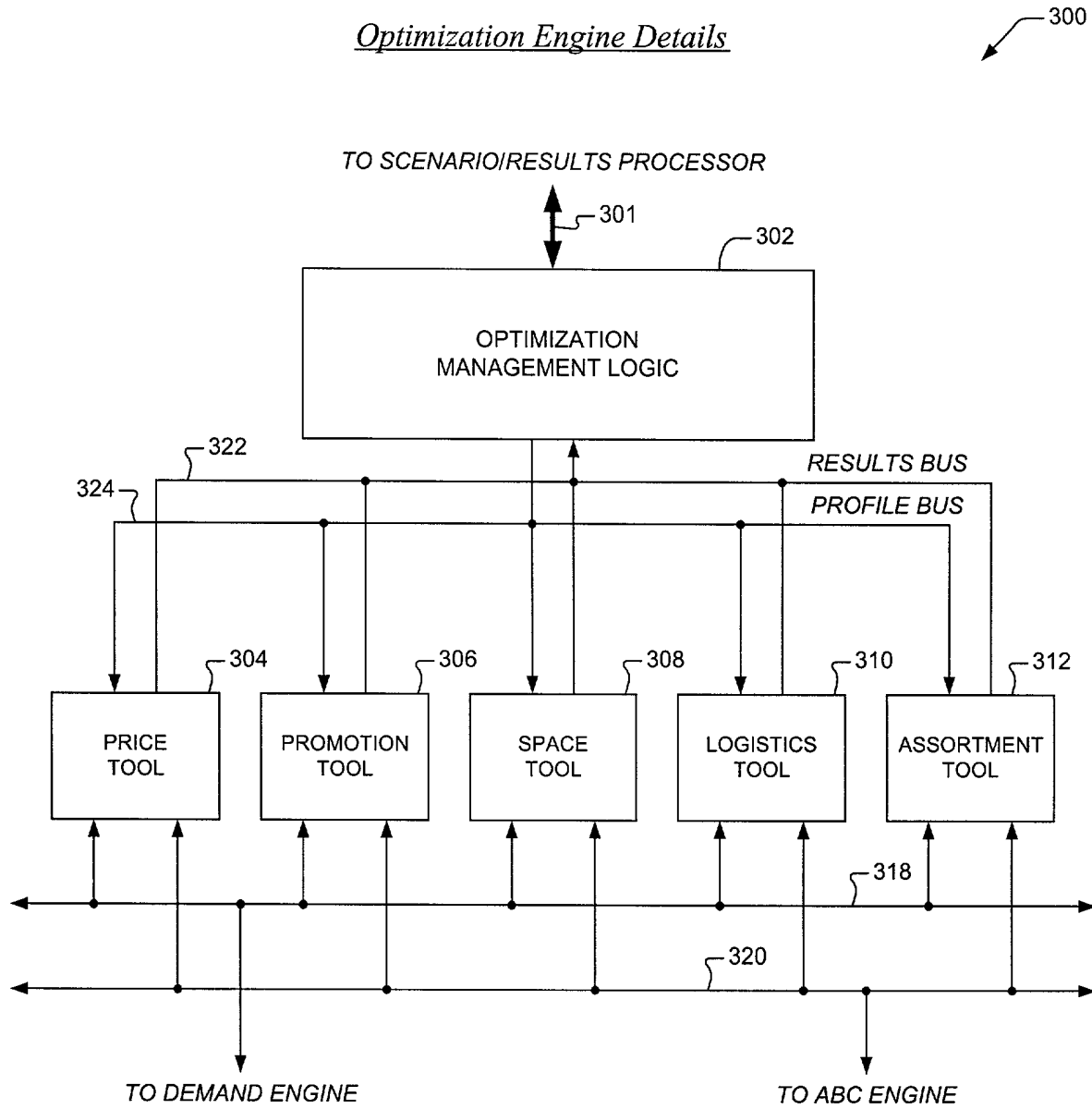


FIG. 4

Scenario/Results Processor Details

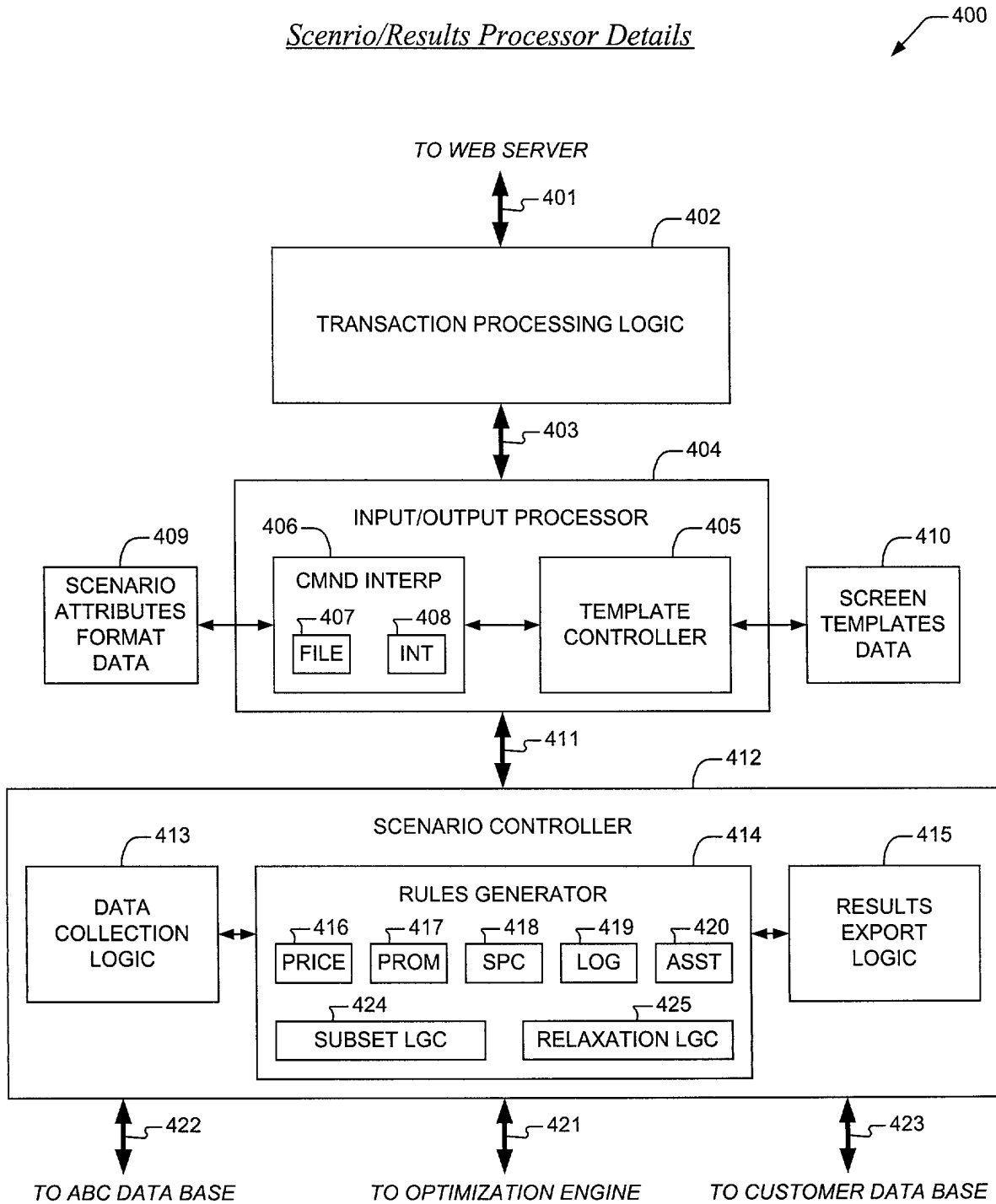




FIG. 5

Method for Optimizing Merchandising Lever Attributes

500

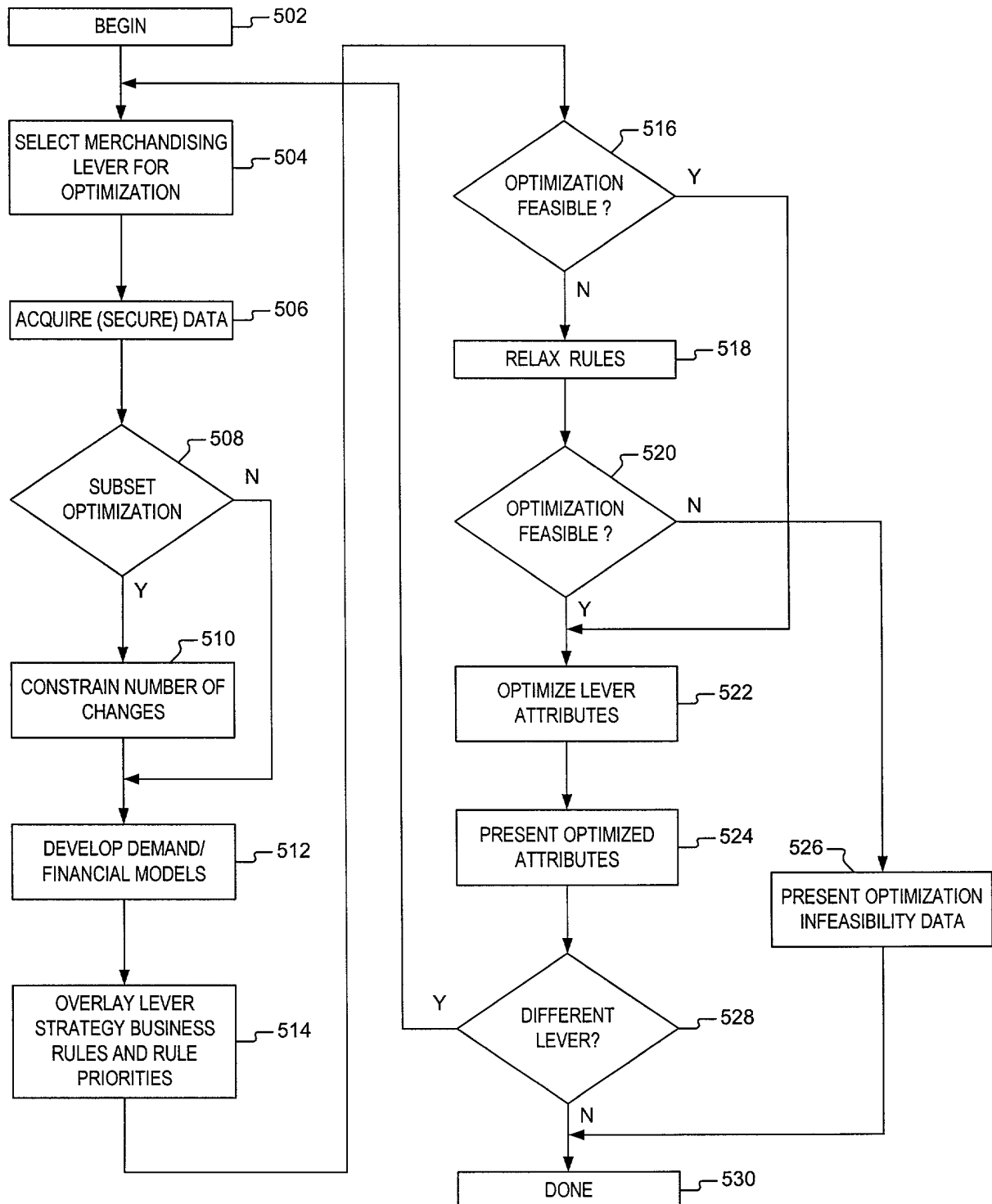




FIG. 7

# Scenario Menu Options Window

700

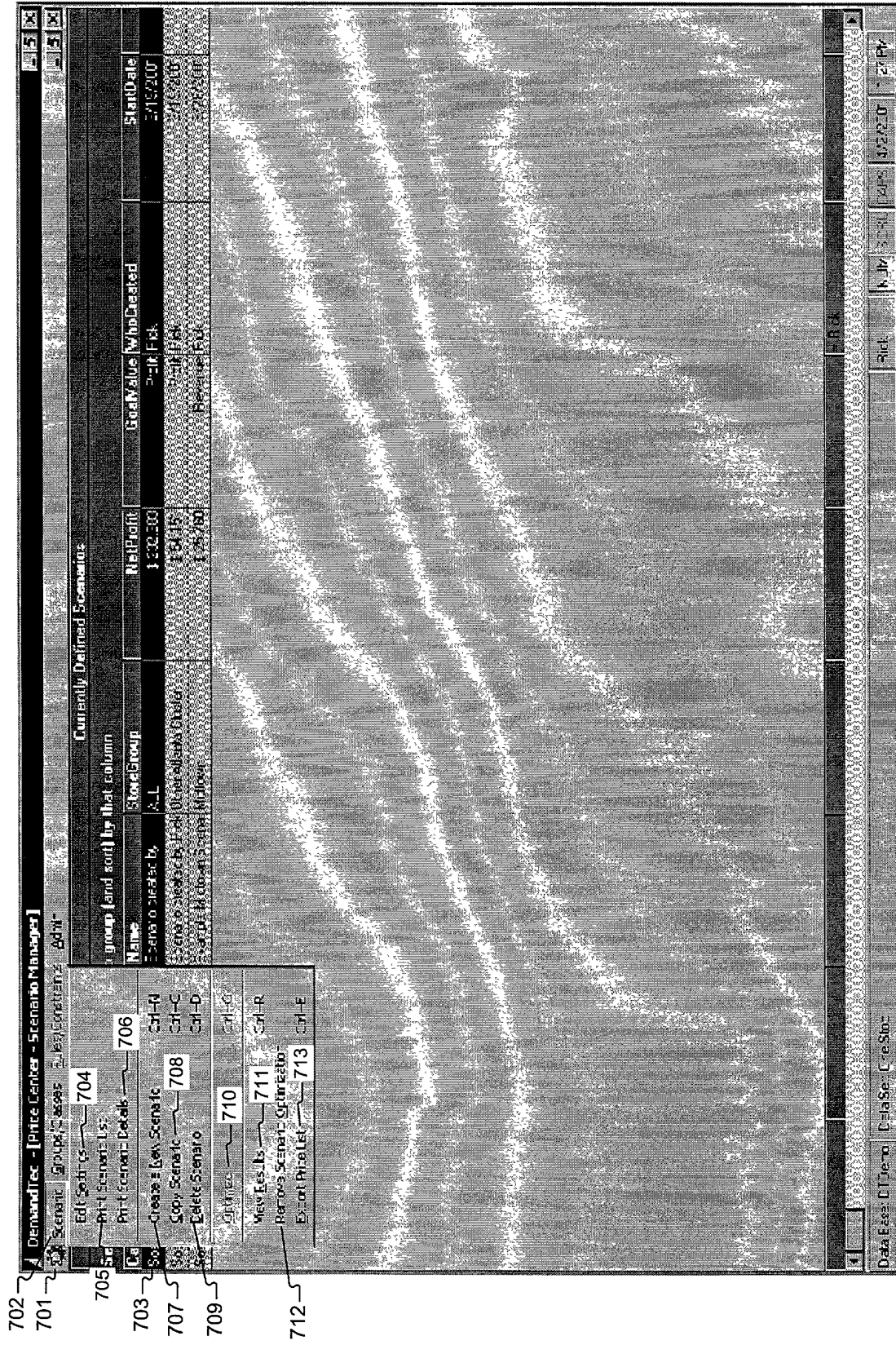
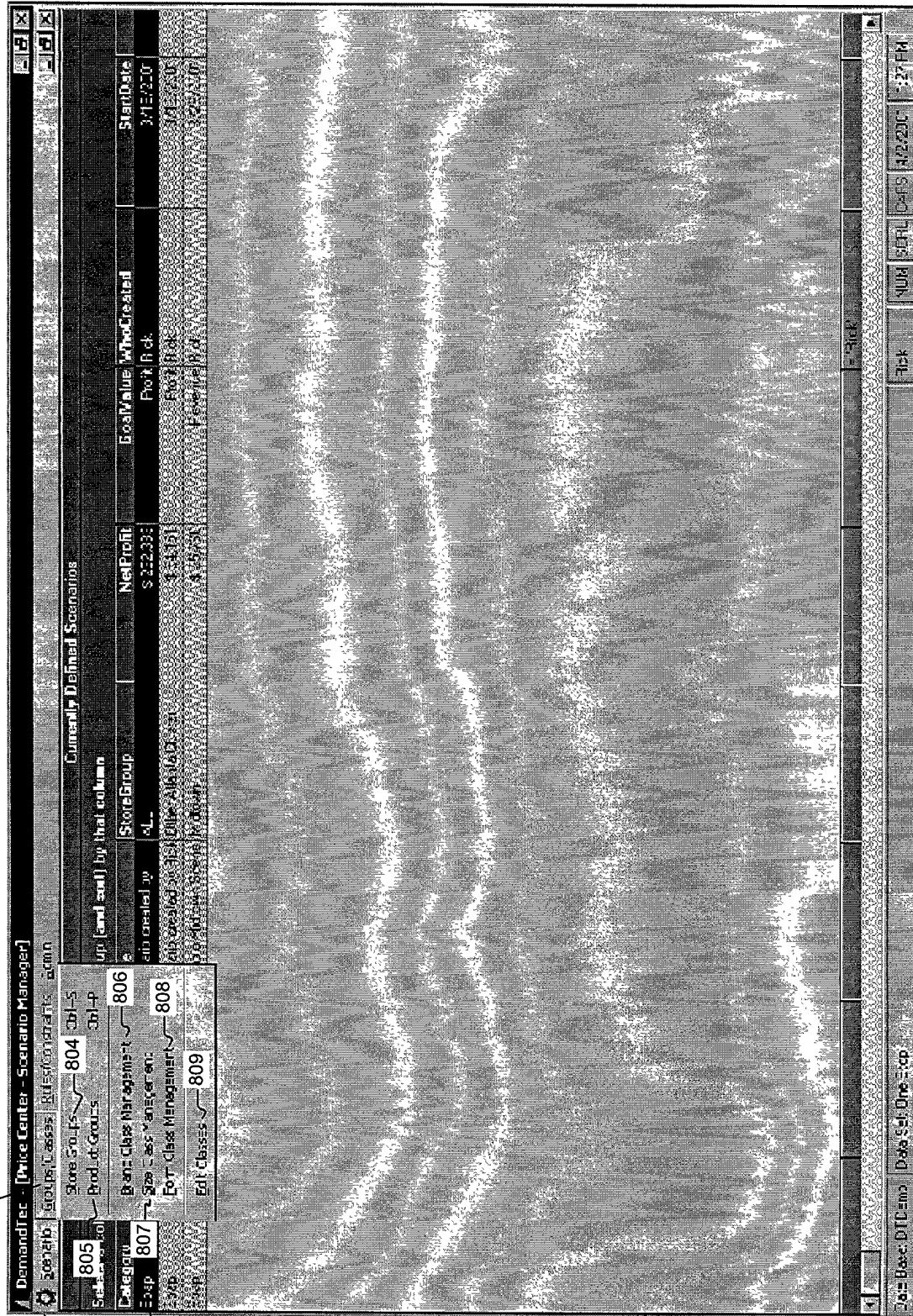


FIG. 8

Groups/Classes Menu Options Window



800

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Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	0.52	0.50	0	1	-0.05	3.0	0.99
Marital Status	0.68	0.47	0	1	0.10	3.1	0.98
Education	12.5	2.1	9	16	-0.20	3.3	0.97
Income	45000	15000	20000	80000	0.30	3.4	0.96
Health	0.75	0.43	0	1	-0.10	3.0	0.99
Stress	0.60	0.49	0	1	0.05	3.1	0.98
Depression	0.55	0.50	0	1	-0.05	3.0	0.99
Life Satisfaction	0.70	0.46	0	1	-0.10	3.0	0.99
Resilience	0.65	0.48	0	1	0.00	3.1	0.98
Optimism	0.60	0.49	0	1	-0.05	3.0	0.99
Self-Esteem	0.70	0.46	0	1	-0.10	3.0	0.99
Loneliness	0.50	0.50	0	1	0.00	3.1	0.98
Loneliness (Control)	0.50	0.50	0	1	0.00	3.1	0.98
Loneliness (Mediator)	0.50	0.50	0	1	0.00	3.1	0.98
Loneliness (Outcome)	0.50	0.50	0	1	0.00	3.1	0.98

900



FIG. 10

New Scenario Category Template

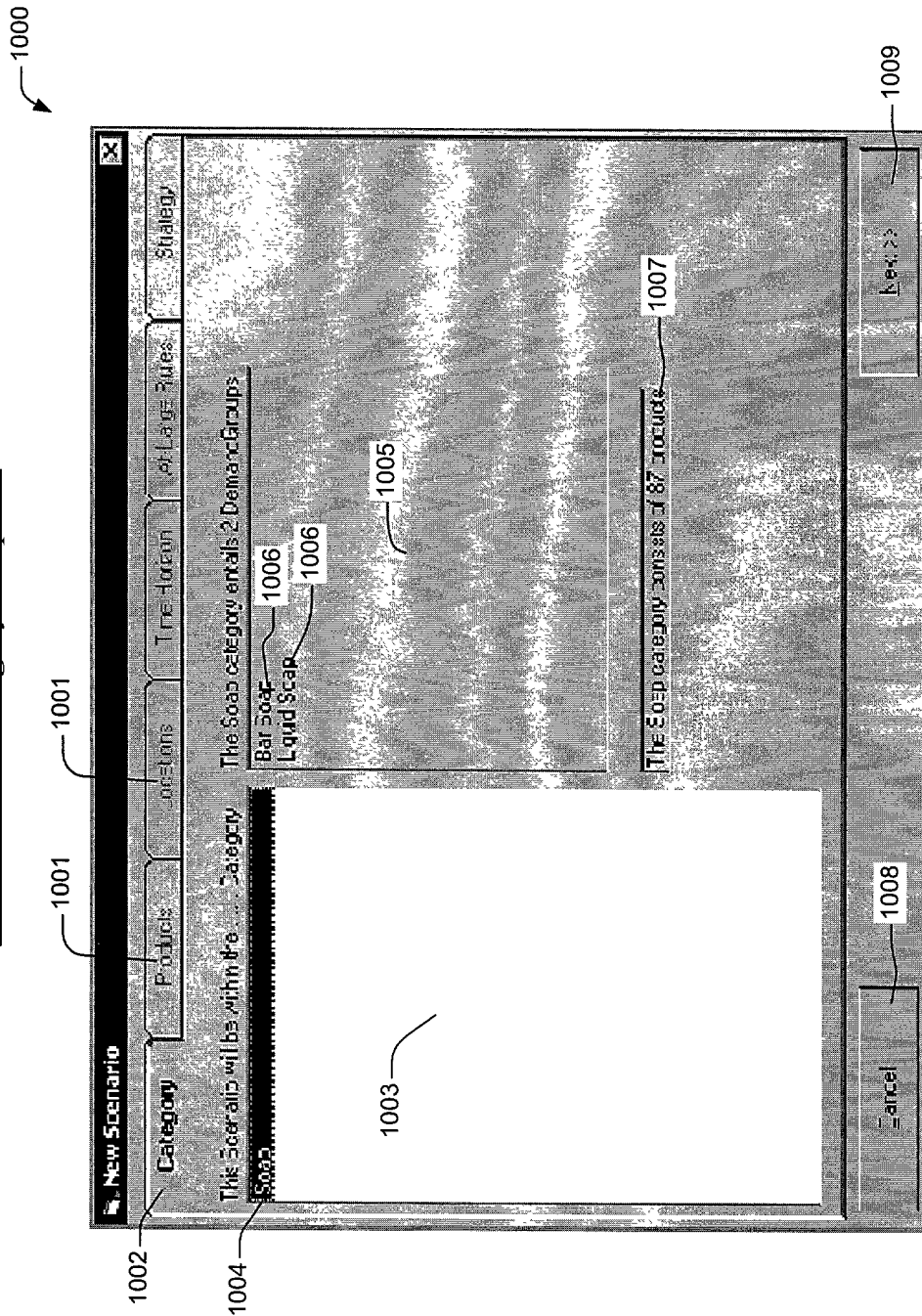
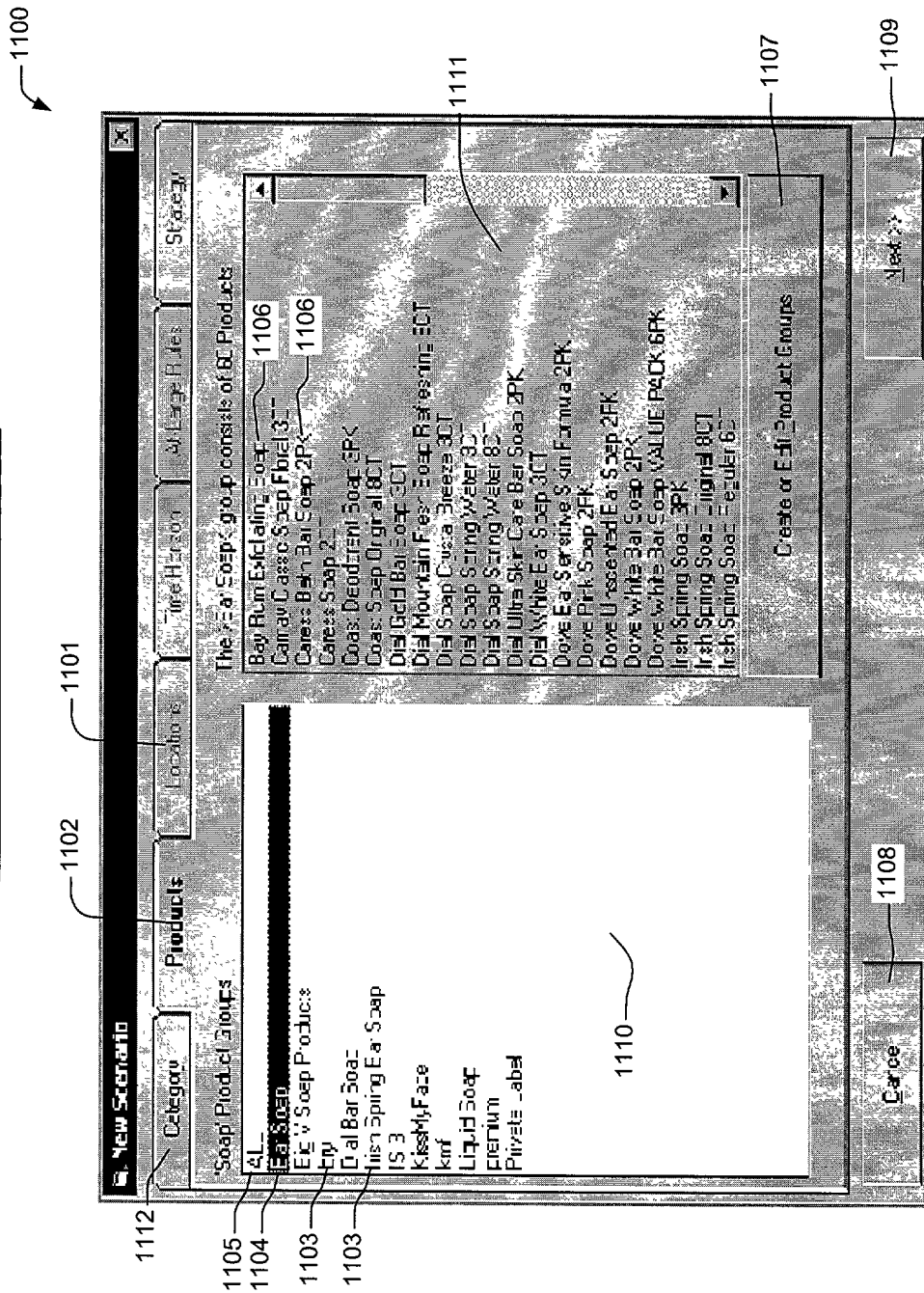


FIG. 11

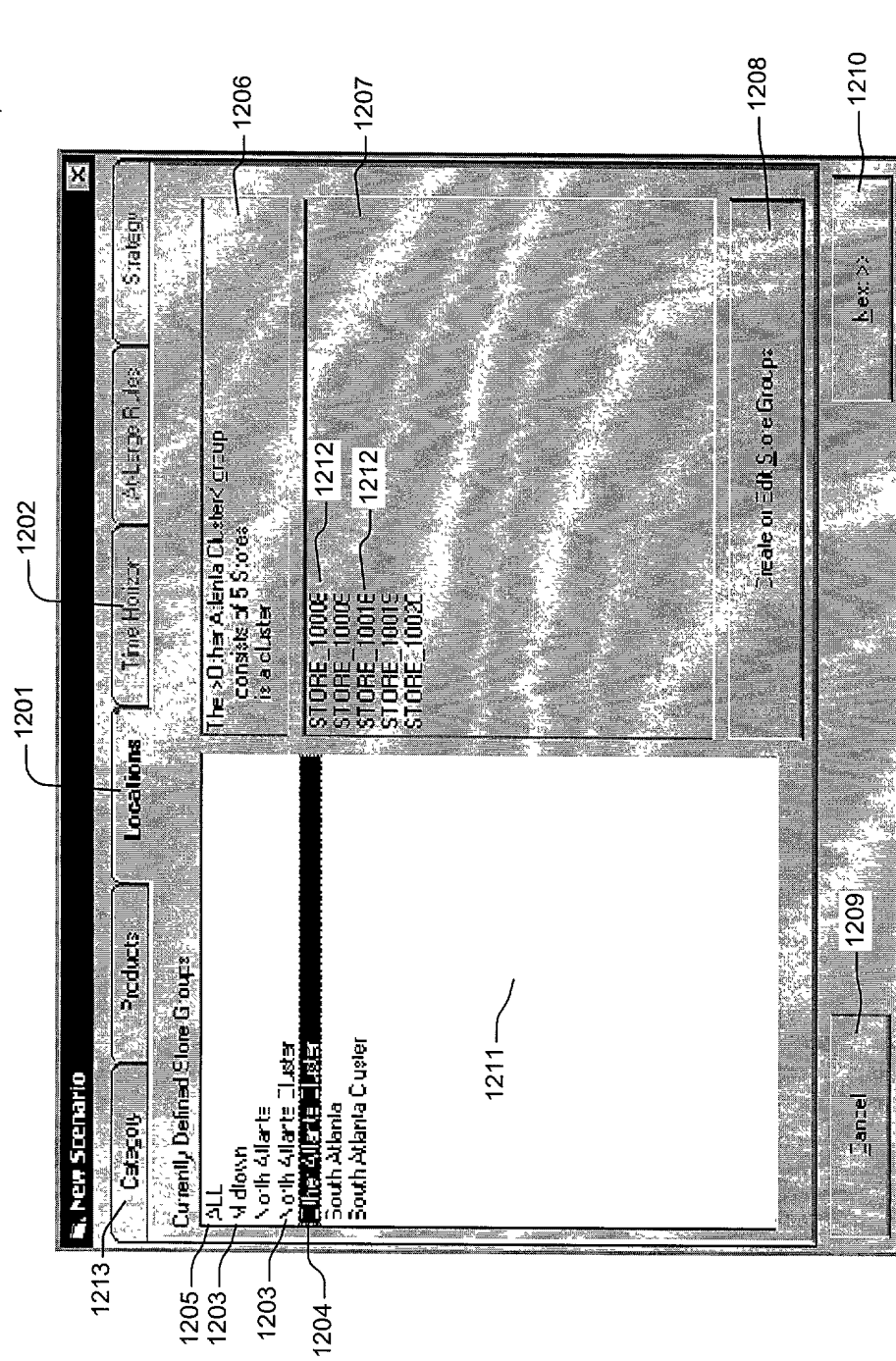
# New Scenario Products Window



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FIG. 12

New Scenario Locations Window



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FIG. 13

New Scenario Time Horizon Window

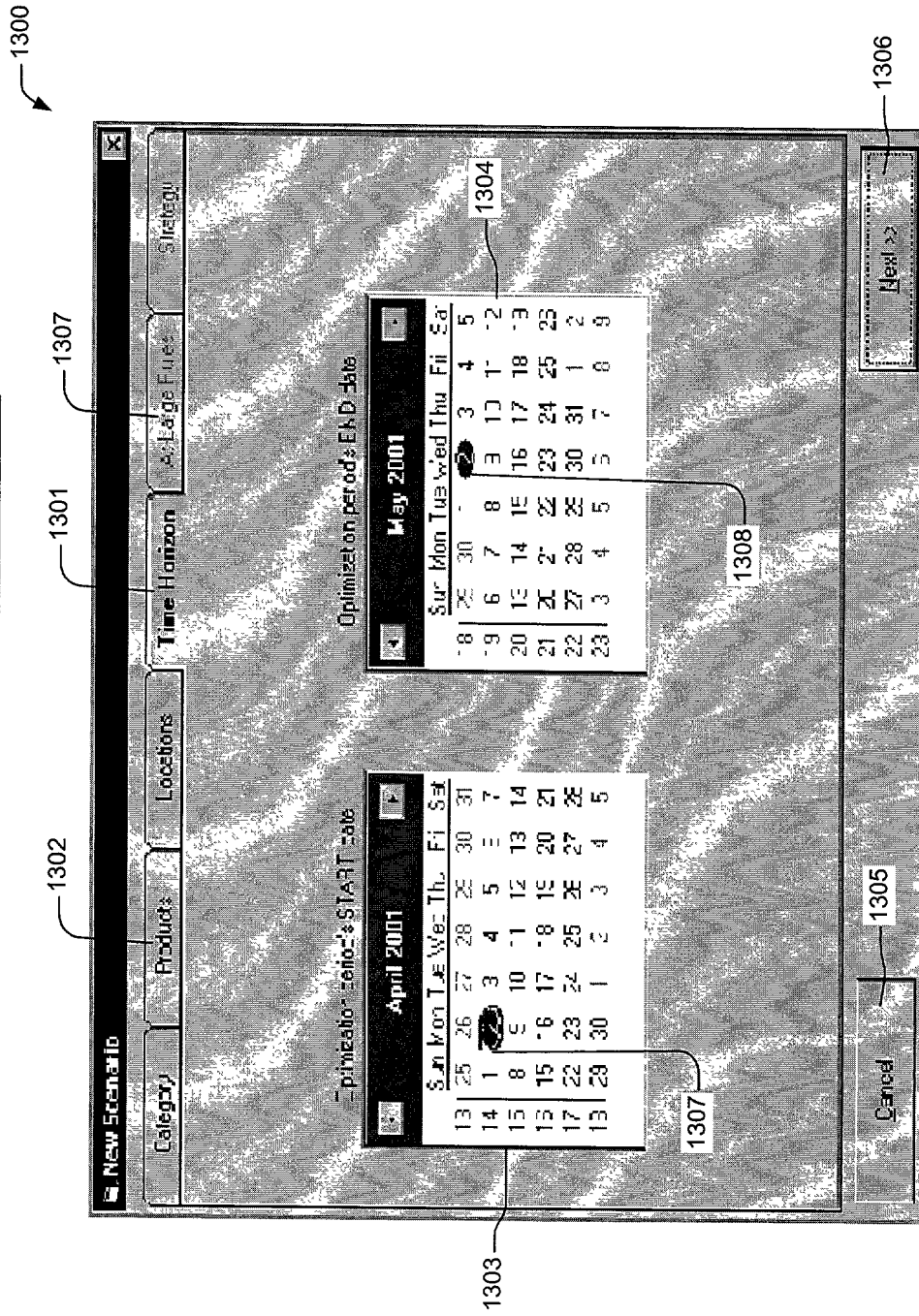


FIG. 14

# New Scenario At-Large Rules Window

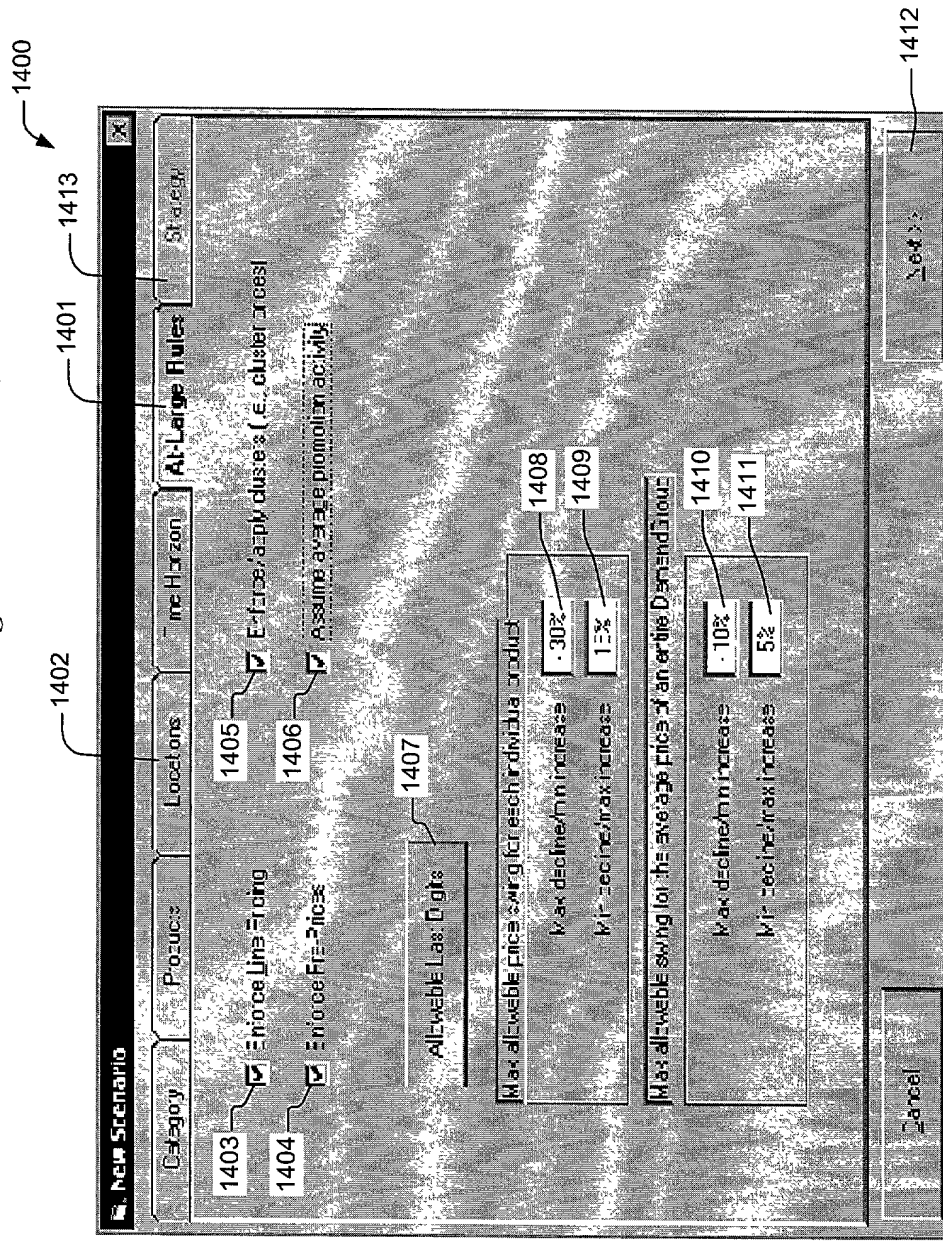
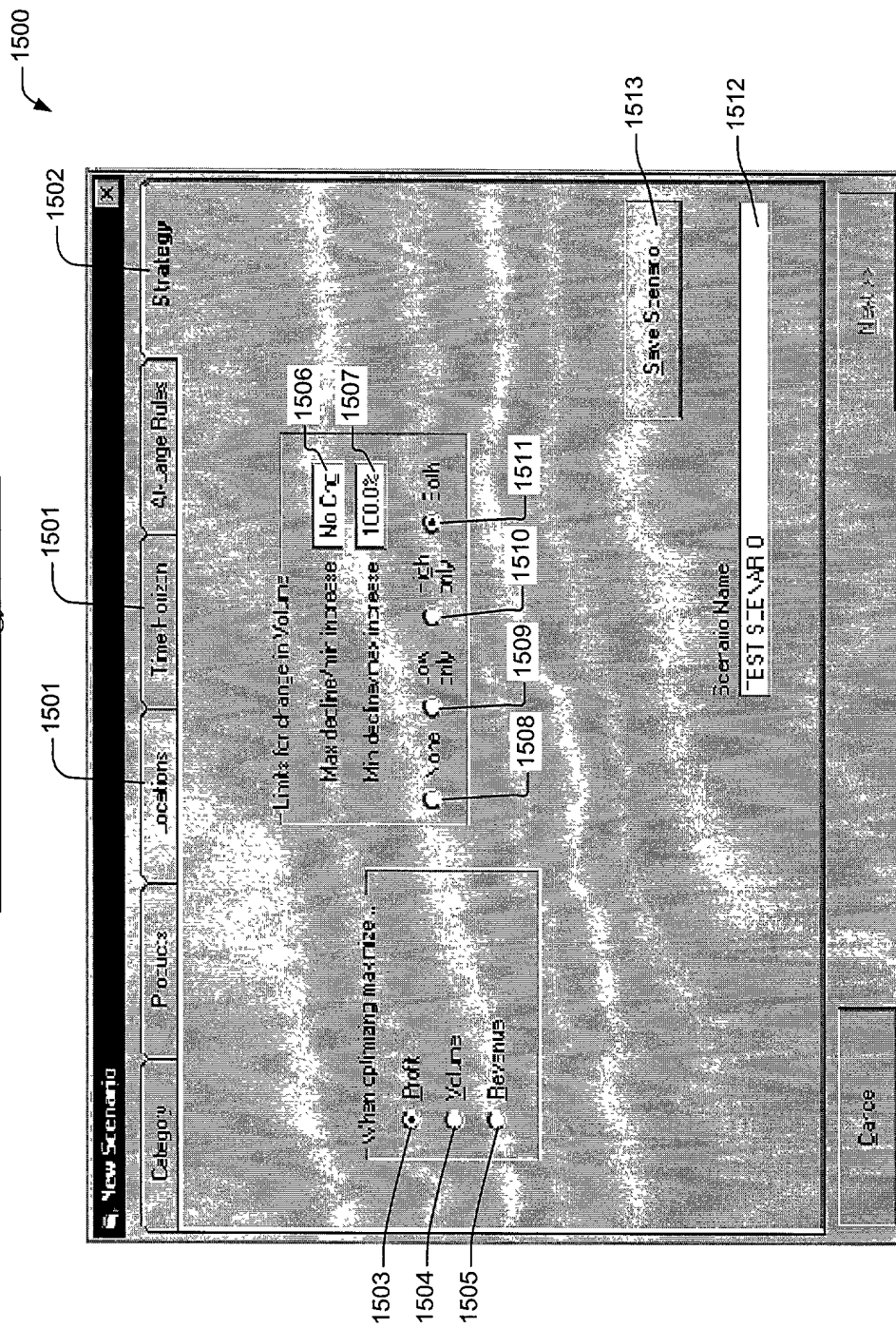


FIG. 15

# New Scenario Strategy Window



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+FIG. 16



Variable	Mean	SD	Min	Max
Age	38.5	10.2	22	65
Gender	0.5	0.5	0	1
Marital status	0.7	0.5	0	1
Education	12.5	1.5	9	16
Income	15.2	8.5	5	35
Health status	1.2	0.8	0	3
Stress level	2.5	1.2	1	4
Life satisfaction	3.8	1.5	1	5
Work engagement	4.2	1.0	2	5
Organizational commitment	4.5	1.1	2	5
Turnover intention	1.8	1.0	0	4
Job satisfaction	3.5	1.2	1	5
Perceived organizational support	4.0	1.0	2	5
Trust in supervisor	4.1	1.1	2	5
Trust in organization	3.9	1.2	2	5
Perceived justice	4.3	1.0	2	5
Organizational citizenship behavior	4.4	1.1	2	5
Counterproductive work behavior	1.5	0.8	0	3
Work-life balance	3.2	1.0	1	5
Employee well-being	3.7	1.1	1	5
Organizational performance	4.6	1.0	2	5
Customer satisfaction	4.7	1.1	2	5
Employee retention	4.8	1.0	2	5
Organizational innovation	4.9	1.1	2	5
Employee engagement	4.5	1.0	2	5
Organizational culture	4.6	1.1	2	5
Employee loyalty	4.7	1.0	2	5
Organizational reputation	4.8	1.1	2	5
Employee productivity	4.9	1.0	2	5
Organizational effectiveness	5.0	1.1	2	5
Employee turnover	1.2	0.5	0	2
Organizational success	5.1	1.0	2	5
Employee commitment	4.9	1.1	2	5
Organizational climate	4.7	1.0	2	5
Employee satisfaction	4.5	1.1	2	5
Organizational image	4.8	1.0	2	5
Employee motivation	4.6	1.1	2	5
Organizational strategy	4.9	1.0	2	5
Employee performance	4.7	1.1	2	5
Organizational structure	4.8	1.0	2	5
Employee behavior	4.6	1.1	2	5
Organizational policy	4.9	1.0	2	5
Employee attitude	4.7	1.1	2	5
Organizational mission	4.8	1.0	2	5
Employee values	4.6	1.1	2	5
Organizational vision	4.9	1.0	2	5
Employee beliefs	4.7	1.1	2	5
Organizational goals	4.8	1.0	2	5
Employee expectations	4.6	1.1	2	5
Organizational resources	4.9	1.0	2	5
Employee capabilities	4.7	1.1	2	5
Organizational strengths	4.8	1.0	2	5
Employee weaknesses	4.6	1.1	2	5
Organizational opportunities	4.9	1.0	2	5
Employee threats	4.7	1.1	2	5
Organizational challenges	4.8	1.0	2	5
Employee solutions	4.6	1.1	2	5
Organizational outcomes	4.9	1.0	2	5
Employee inputs	4.7	1.1	2	5
Organizational processes	4.8	1.0	2	5
Employee results	4.6	1.1	2	5
Organizational systems	4.9	1.0	2	5
Employee environments	4.7	1.1	2	5
Organizational contexts	4.8	1.0	2	5
Employee networks	4.6	1.1	2	5
Organizational relationships	4.9	1.0	2	5
Employee interactions	4.7	1.1	2	5
Organizational communication	4.8	1.0	2	5
Employee collaboration	4.6	1.1	2	5
Organizational coordination	4.9	1.0	2	5
Employee cooperation	4.7	1.1	2	5
Organizational cooperation	4.8	1.0	2	5
Employee competition	4.6	1.1	2	5
Organizational competition	4.9	1.0	2	5
Employee conflict	4.7	1.1	2	5
Organizational conflict	4.8	1.0	2	5
Employee conflict resolution	4.6	1.1	2	5
Organizational conflict resolution	4.9	1.0	2	5
Employee conflict management	4.7	1.1	2	5
Organizational conflict management	4.8	1.0	2	5
Employee conflict prevention	4.6	1.1	2	5
Organizational conflict prevention	4.9	1.0	2	5
Employee conflict avoidance	4.7	1.1	2	5
Organizational conflict avoidance	4.8	1.0	2	5
Employee conflict escalation	4.6	1.1		

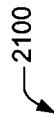
[illegible]

1701-



[illegible]

2000



### General Information Window for Selected Configured Scenario





2200

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The figure consists of two side-by-side screenshots of the Deal Down software interface. The left screenshot shows the 'Product Selection' dialog box. It has a title bar 'Deal Down' and a 'Product Selection' label. Below it is a text field 'Show the results of the search on:' followed by a dropdown menu labeled 'Categories' (2301). Below that is a text field 'Specifically show the results of the Deal Down:' followed by a dropdown menu labeled 'Deal Down' (2302). At the bottom are 'Cancel' and 'Display' buttons. The right screenshot shows the 'Show the results of the search' dialog box. It has a title bar 'Deal Down' and a 'Show the results of the search' label. Below it is a text field 'Show the results of the search on:' followed by a dropdown menu labeled 'Deal Down' (2303). Below that is a text field 'Specifically show the results of the Deal Down:' followed by a dropdown menu labeled 'Deal Down' (2304). At the bottom are 'Cancel' and 'Display' buttons. Both screenshots include numbered callouts 2301 through 2309 pointing to various UI elements.

## Results Drill Down Configuration Template

### Drilled Down Analyze Results Window

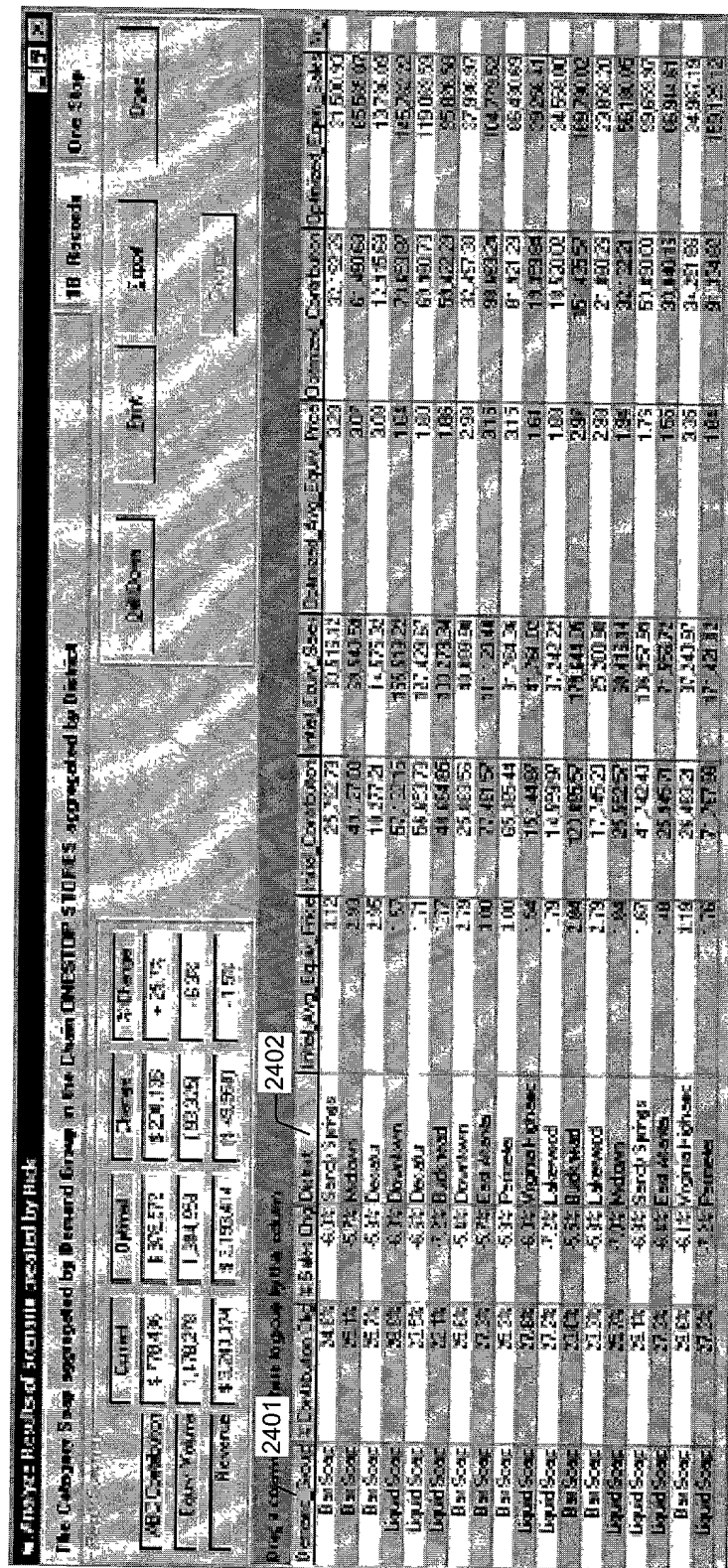


FIG. 25

File Designation Window

2500

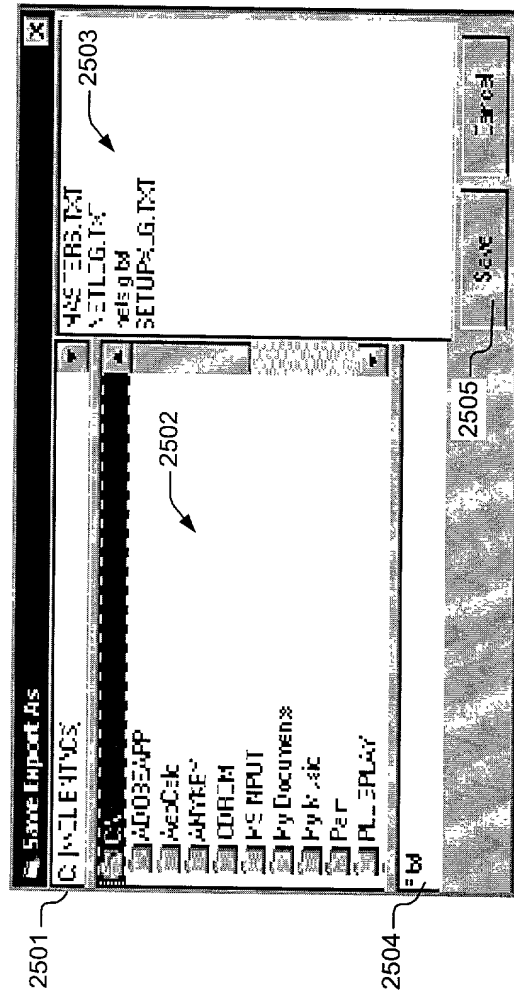
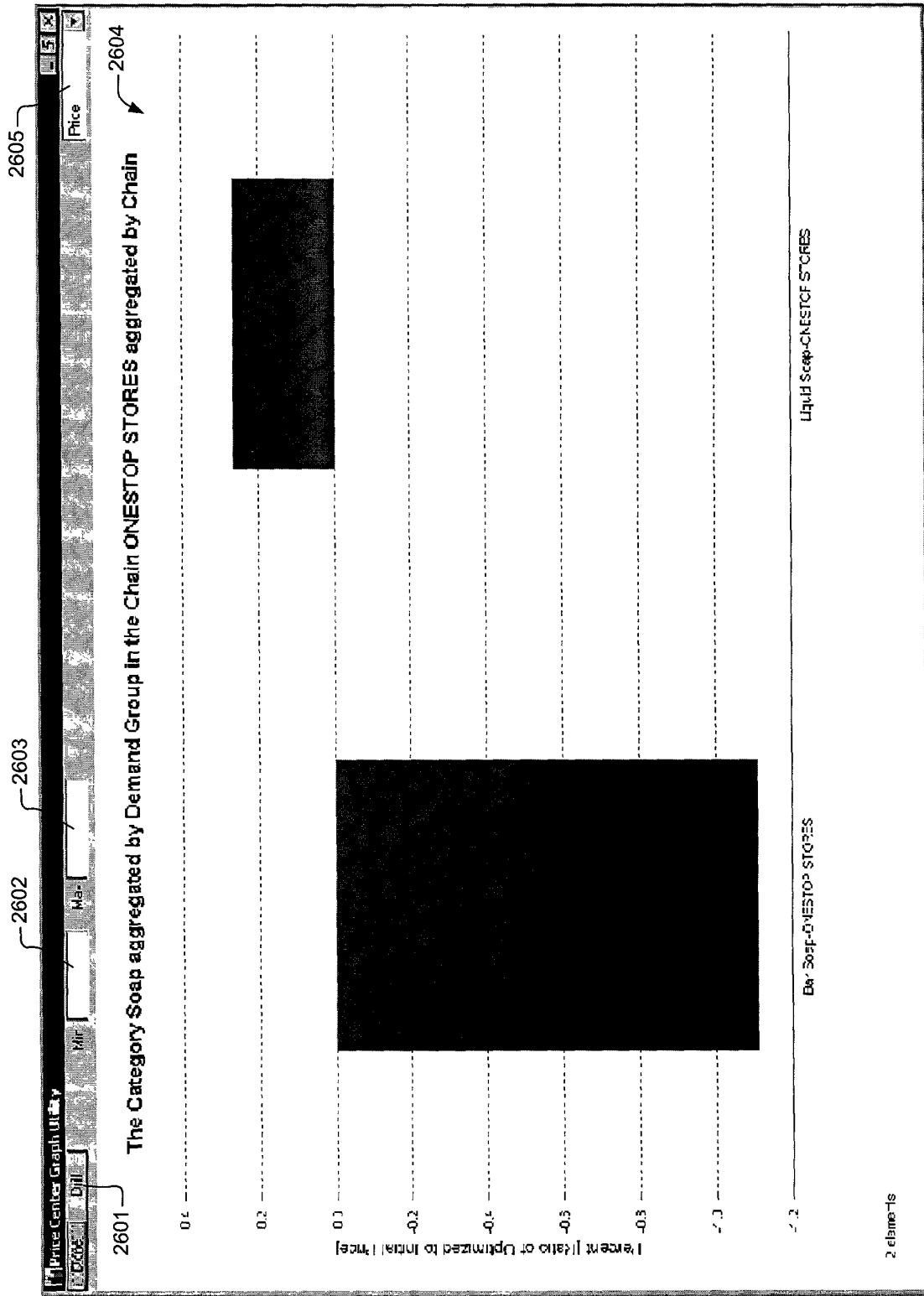


FIG. 26

Graphical Results Display Window

2600



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FIG. 27

Personal Settings Window

2700

**Personal Settings**

☒ Automatically refresh (i.e., reload) scenario list once every minute

Display the following scenario properties (fields)

ID	2701
Name	
Description	
CompanyID	2702
LocationSimulID	
ProductGroupID	
StartDate	
EndDate	2702
ScenarioType	
GoalValue	
ProductLevelID	
ScenarioRuns	
WhoCreated	
DateCreated	
WhoUpdated	2702
DateUpdated	
NetProfit	
UsePrePrice	
MaxPriceIncrease	
MinPriceIncrease	
MinUGAvgPrc	

Hide All Show All

Cancel Done

2703

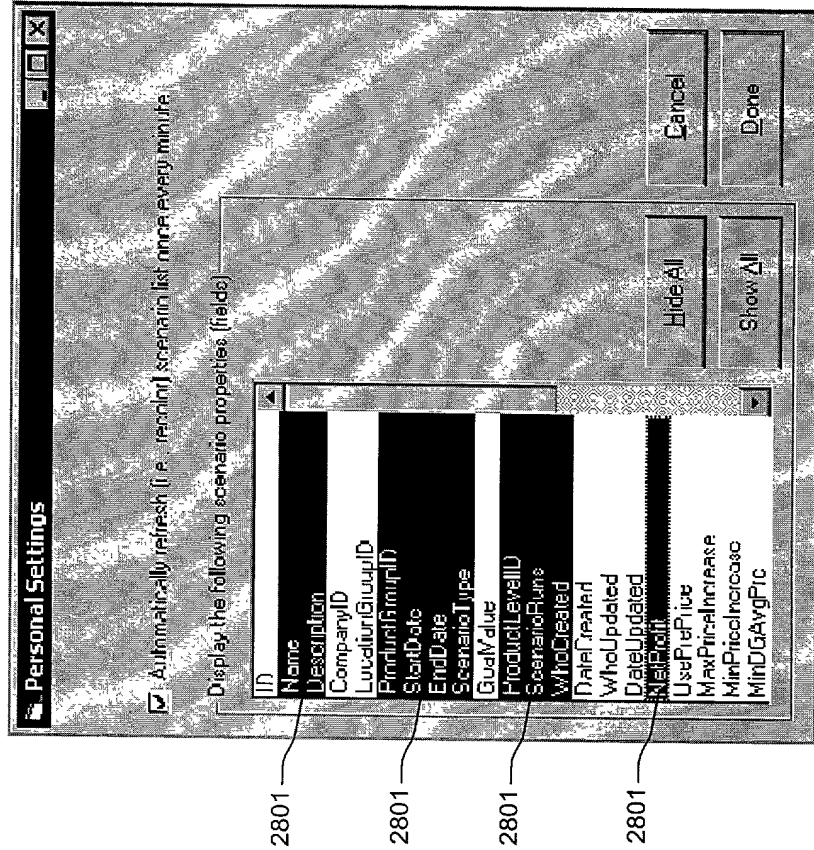
+

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FIG. 28

Configured Personal Settings Template

2800



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### Personalized Currently Defined Scenarios Window

[illegible]

# Create and Manage Store Groups Template

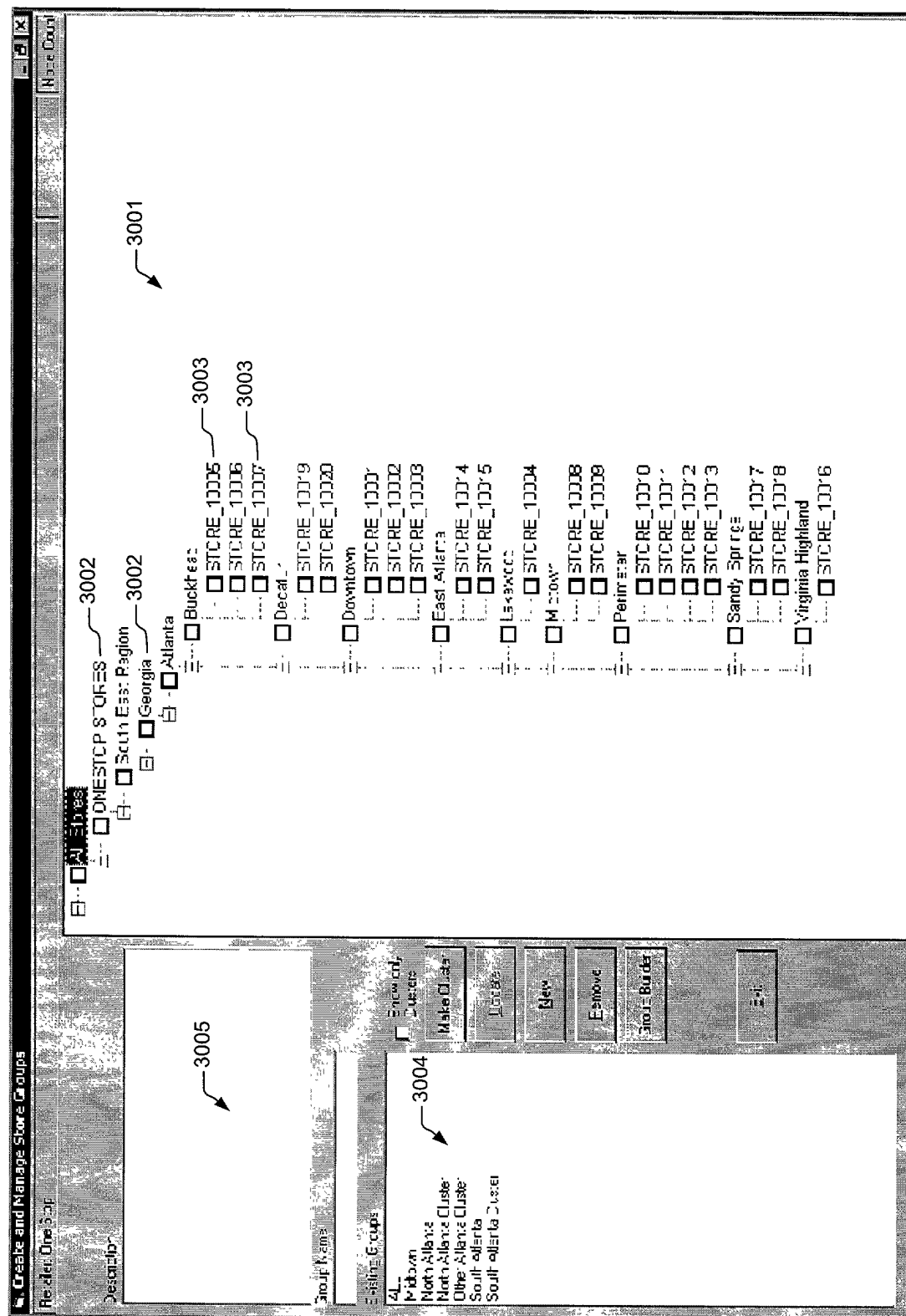
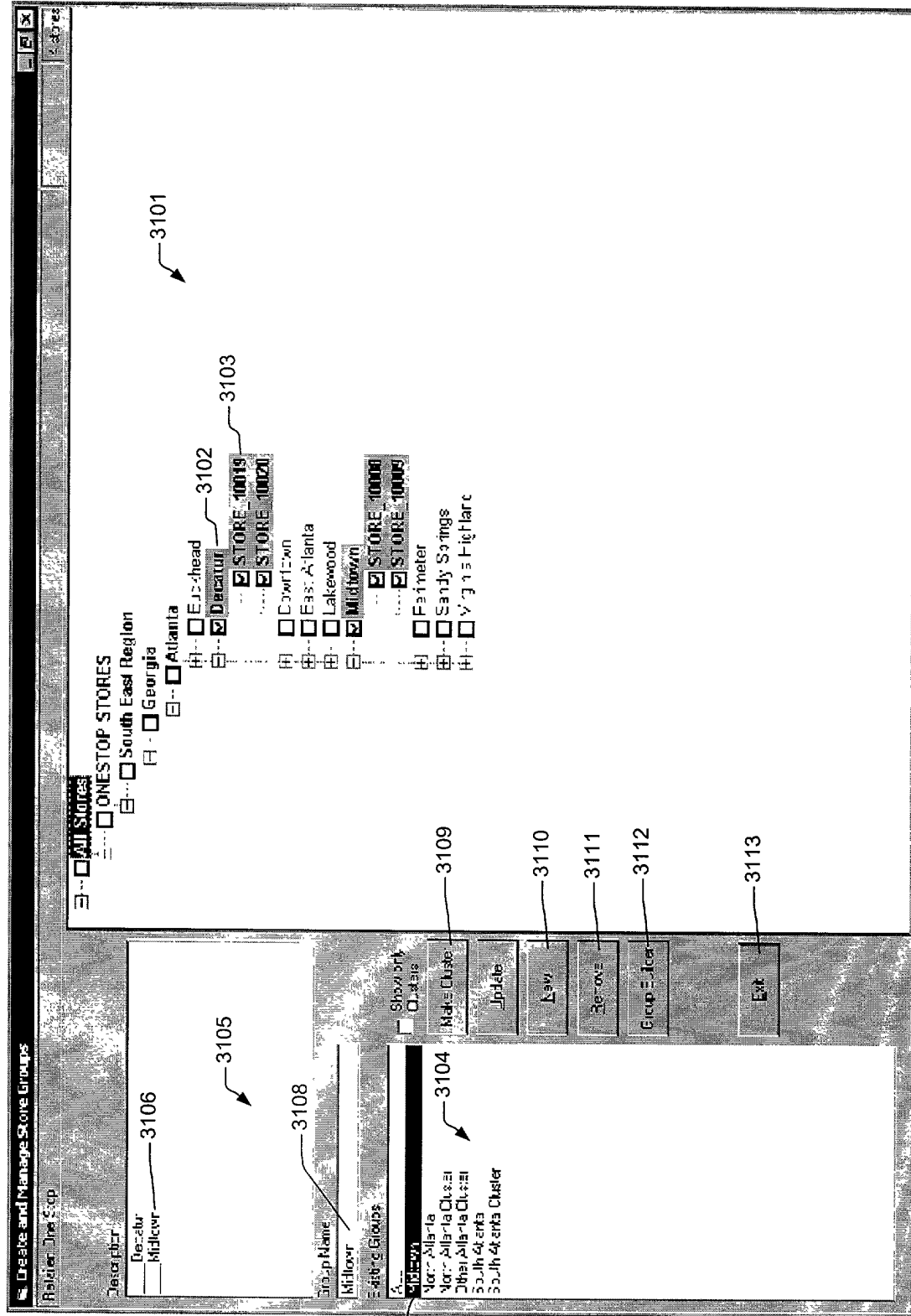




FIG. 31

Configured Create and Manage Store Groups Window

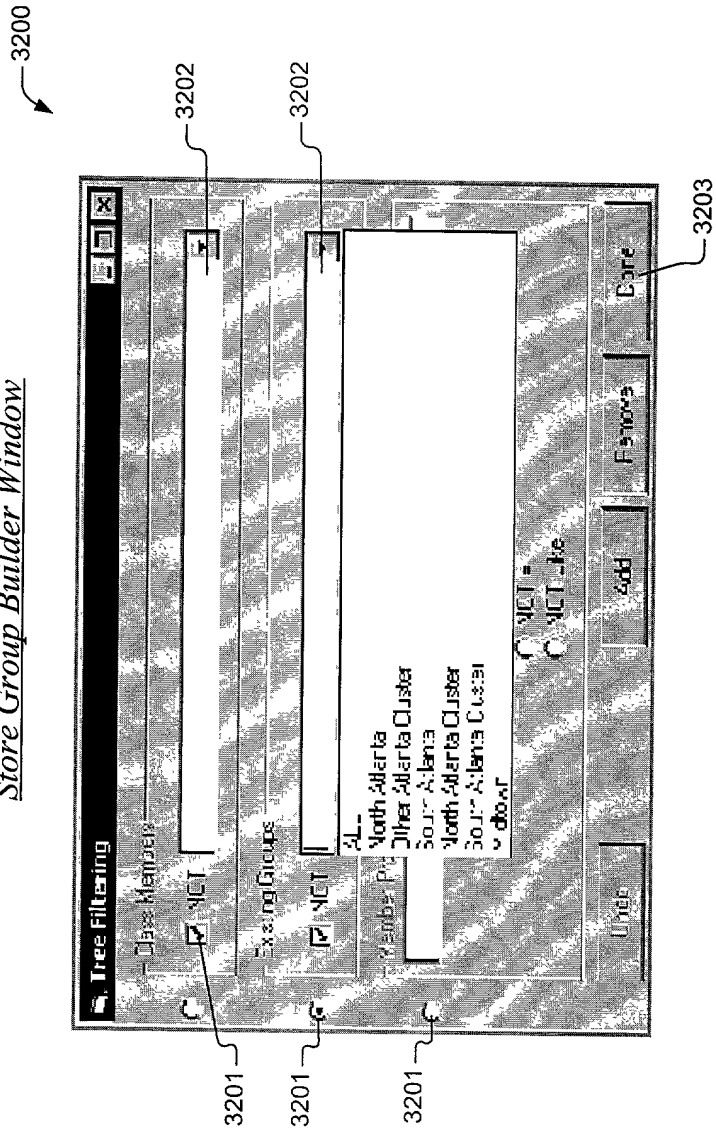


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FIG. 32

Store Group Builder Window



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## Rules Information Template

—3400

[illegible]



### Rules/Constraints Menu Window

[illegible]

FIG. 36

First Rule Warning Window

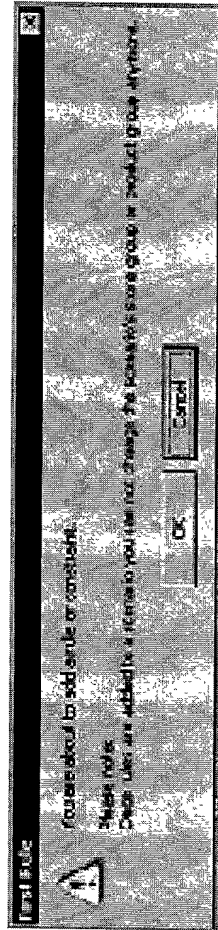


FIG. 37

Add Rule for Product Group Window

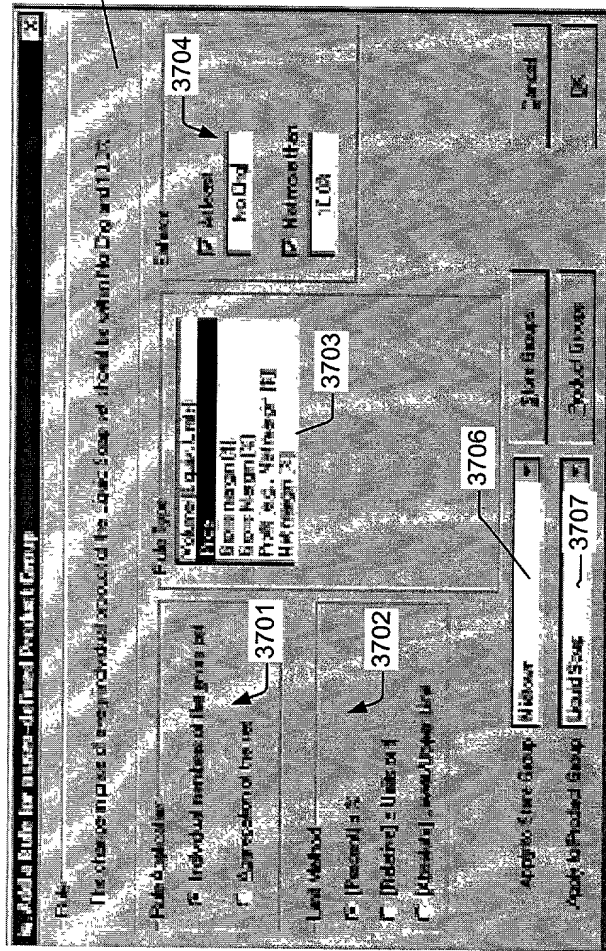
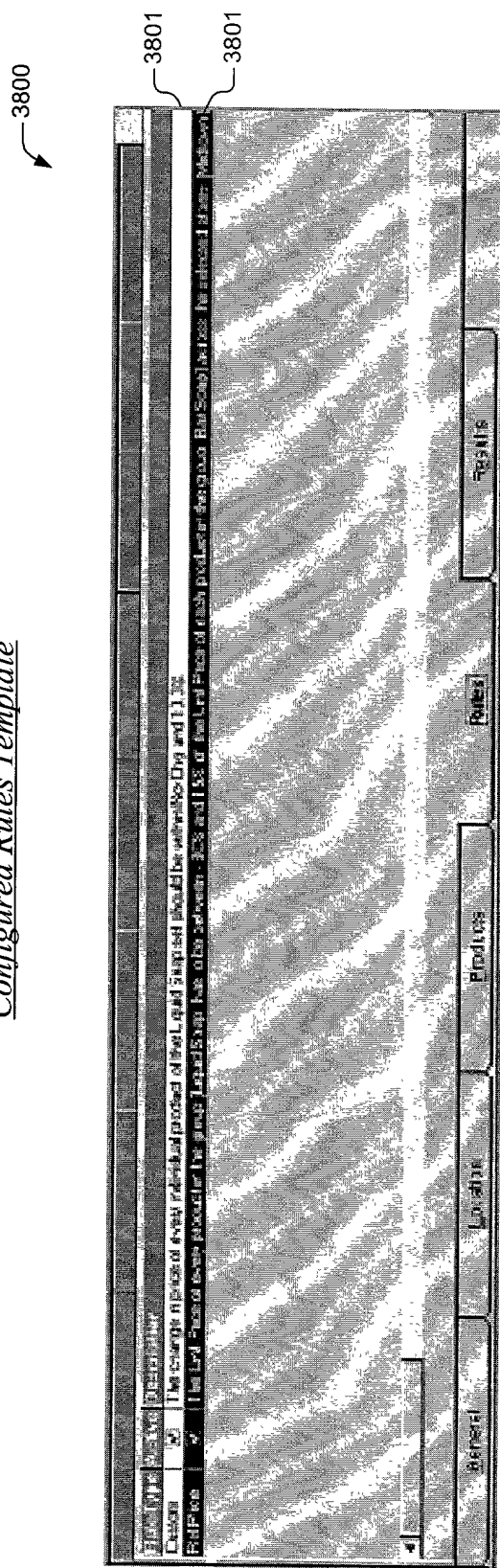


FIG. 38

## Configured Rules Template



3801

3801

### Selection of Edit Options within Currently Defined Scenarios Template

### Selection of Edit Options within Currently Defined Scenarios Template

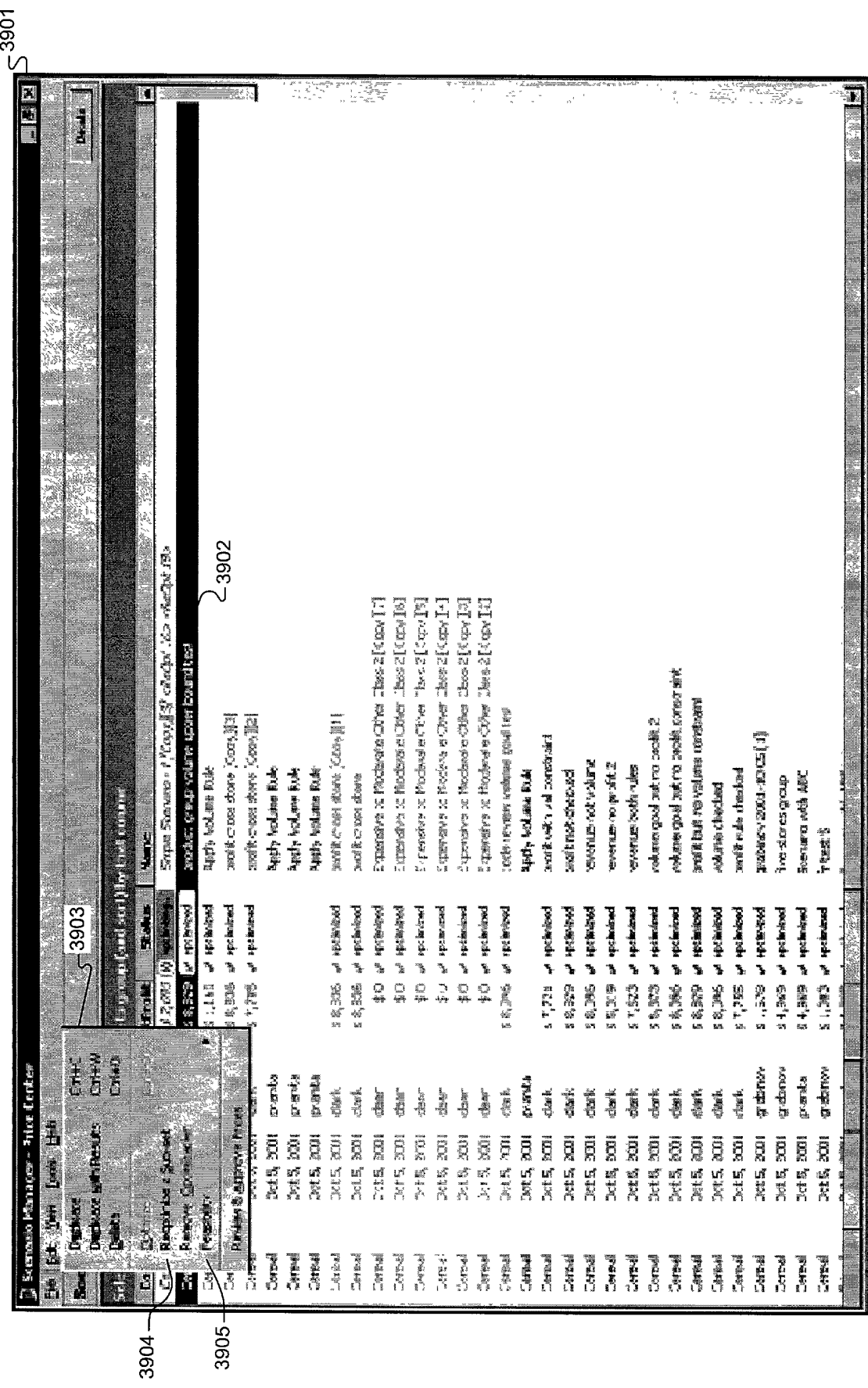






FIG. 41

Reoptimize a Subset Template

4100

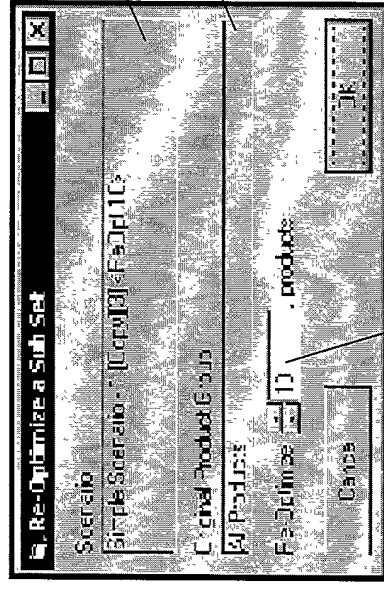


FIG. 42

# Rules Summary Template

Simple Scenario - 1 [Copy] [3] <Rept 10> - Price Center  
 File Edit View Help  
 Current Scenario: Simple Scenario - 1 [Copy] [3] <Rept 10>  
 General Rules Results  
 Status: Not submitted for optimization  
 Allowable List Dept: 4200 (10/1/2000)

Active	Description	Name	Type	Products	Start	End
<input checked="" type="checkbox"/>	Enforce Price Zones	Enforce Price Zones	Pricezone	All Products	Simple Start Group	0
<input checked="" type="checkbox"/>	Use ABC Data	Use ABC Data	ABC	All Products	Simple Start Group	0
<input checked="" type="checkbox"/>	Product Price Bounds with 1.15 - 0.7	Product Price Bounds with 1.15 - 0.7	ProdPrice	All Products	Simple Start Group	1
<input checked="" type="checkbox"/>	Price Demand Group bounds with 1.05 - 0.5	Price Demand Group bounds with 1.05 - 0.5	QDemandGroup	All Products	Simple Start Group	2
<input checked="" type="checkbox"/>	Enforce Price Pricing	Enforce Price Pricing	PricePric	All Products	Simple Start Group	3
<input checked="" type="checkbox"/>	Enforce Unit Pricing	Enforce Unit Pricing	UnitPrice	All Products	Simple Start Group	4
<input checked="" type="checkbox"/>	The change in every individual product of the	Demand Group Rules	DemandGr	All Products	Simple Start Group	5
<input checked="" type="checkbox"/>	The change in average volume of the product	Gross Margin Rule for Product Groups	MarginGN	All Products	Simple Start Group	6

4203 4203 4204 4205

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FIG. 44

Feasibility Analysis Configuration Template

